AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Previously Presented)** A method for scaling a bandwidth of a coarse wavelength division multiplexing infrastructure, the method comprising:

selecting a plurality of pluggable transceivers to scale a channel density of a coarse wavelength division multiplexing infrastructure according to use of a network, wherein a bandwidth of each channel associated with each pluggable transceiver is selected based in part on the use of the network;

multiplexing channels associated with the plurality of pluggable transceivers onto an optical signal, wherein each of the channels is of a wavelength that can be superimposed on a bandwidth of a coarse wavelength division multiplexing channel; and

propagating the optical signal onto a fiber optic network, wherein the fiber optic network comprises components that are compatible for use with coarse wavelength division multiplexing signals.

2. **(Previously Presented)** The method as defined claim 1, wherein multiplexing the channels comprises superimposing the one or more of the channels on the coarse wavelength division multiplexing bandwidth of said components of the fiber optic network.

3. **(Original)** The method as defined claim 1, wherein the optical signal is propagated onto the fiber optic network at a first node, the method further comprising the act of removing the optical signal from the fiber optic network at a second node.

4. **(Previously Presented)** The method as defined claim 3, wherein the first node and the second comprise separate nodes within a metro area network and wherein the first node comprises a carrier hotel site that provides data services to the second node.

5. **(Previously Presented)** The method as defined claim 1, further comprising replacing the plurality of pluggable transceivers such that the channel density of a coarse wavelength division multiplexing infrastructure is scaled to a second channel density.

6. **(Original)** The method as defined claim 3, wherein the first node comprises a four-channel mux/demux for sending and receiving data on up to four CWDM channels and the second node comprises an optical add delete multiplexer for sending and receiving data on a specific CWDM channel.

7. **(Original)** The method as defined claim 6, wherein the first node further comprises a switch for routing data services communicated over the specific CWDM channel.

8. **(Original)** The method as defined claim 1, wherein the coarse wavelength division multiplexing channel is selected from the 1510, 1530, 1550, and 1570 nm CWDM channels.

9. **(Previously Presented)** An optical system for use in scaling a bandwidth of a coarse wavelength division multiplexing (CWDM) infrastructure, the system comprising:

a plurality of pluggable transceivers selected to scale a bandwidth of a coarse wavelength division multiplexing infrastructure from a first channel density to a second channel density according to use of the infrastructure, each transceiver generating a signal associated with a channel that has a bandwidth selected in part on the use of the infrastructure;

a first multiplexer for receiving a first plurality of signals from the plurality of pluggable transceivers and multiplexing the first plurality of signals into a first multiplexed signal, wherein each of the signals is of a wavelength that can be superimposed on a bandwidth of a CWDM channel such that the bandwidth of the CWDM infrastructure is scaled to the second channel density; and

a CWDM multiplexer for receiving a plurality of signals over separate bandwidths of CWDM channels and multiplexing the plurality of signals into a second multiplexed signal for insertion into a fiber optic network, wherein one of the plurality of signals is the first multiplexed signal.

10. **(Previously Presented)** The system as defined claim 9, further comprising additional pluggable transceivers that scale the bandwidth of the CWDM infrastructure to a third channel density, wherein the third channel density include DWDM channels.

11. **(Previously Presented)** The system as defined claim 10, wherein the second multiplexed signal is received at a second node in the metro area network, the second node comprising:

an optical add delete multiplexer configured to remove the first multiplexed signal from the second multiplexed signal and add a fourth multiplexed signal to the second multiplexed signal; and

a DWDM multiplexer/demultiplexer configured to receive the first multiplexed signal, demultiplex the first multiplexed signal into the first plurality signals, multiplex a second plurality of signals into the fourth multiplexed signal, and communicate the fourth multiplexed signal to the optical add delete multiplexer, wherein the first plurality of signals comprises DWDM signals.

12. **(Currently Amended)** A system as defined in claim [9] 11, further comprising a second DWDM multiplexer configured to receive a second plurality of DWDM signals and multiplex the second plurality of DWDM signals into a third multiplexed signal, wherein each of the second plurality of DWDM signals is of a wavelength that can be superimposed on the same bandwidth of a CWDM channel as the first multiplexed signal, wherein the optical add delete multiplexer is configured to receive the third multiplexed signal and superimpose the third multiplexed signal with the second multiplexed signal over the same bandwidth channel as the first multiplexed signal.

13. **(Previously Presented)** A system as defined in claim 9, wherein the plurality of pluggable transceivers further comprise DWDM transceiver modules in communication with the first multiplexer.

14. **(Previously Presented)** A system as defined in claim 13, wherein the DWDM transceiver modules comprise GigaBit Interface Converters selected from one of 100 GHz modules such that the second channel density is 64 channels, 50 GHz modules such that the

second channel density is 128 channels, or 25 GHz modules such that the second channel density is 256 channels.

15. **(Original)** The system as defined claim 13, further comprising a switch in communication with the DWDM transceiver modules for routing data to and from other optical and/or computing devices.

16. **(Previously Presented)** The system as defined claim 9, wherein the first multiplexer comprises a DWDM multiplexer/demultiplexer module.

17. **(Previously Presented)** An optical system for use in scaling a channel density of a coarse wavelength division multiplexing (CWDM) infrastructure, the system comprising:

a first multiplexer configured to receive a first plurality of signals originating from a plurality of pluggable transceivers and multiplex the first plurality of signals into a first multiplexed signal, wherein each of the signals is of a wavelength that can be superimposed on a bandwidth of a CWDM channel; and

an optical add delete multiplexer (OADM) configured to receive the first multiplexed signal from the first multiplexer and superimpose the first multiplexed signal onto a second multiplexed signal that comprises a plurality of CWDM signals such that a channel density of the CWDM infrastructure increases from a first channel density to a second channel density according to use of the infrastructure, wherein a bandwidth of each pluggable transceiver is selected in part on the use of the infrastructure.

18. **(Previously Presented)** The system as defined claim 17, wherein the first multiplexer and the OADM are part of a first node within a metro area network and the first multiplexer comprises a DWDM multiplexer and the first plurality of signals comprise DWDM signals.

19. **(Original)** The system as defined claim 18, wherein the second multiplexed signal is received at a second node in the metro area network, the second node comprising:

a CWDM demultiplexer for receiving the second multiplexed signal, removing the first multiplexed signal from the second multiplexed signal, and adding a fourth multiplexed signal to the second multiplexed signal; and

a DWDM multiplexer/demultiplexer for receiving the first multiplexed signal from the CWDM demultiplexer, demultiplexing the first multiplexed signal into the first plurality of DWDM signals, multiplexing a second plurality of DWDM signals into a fourth multiplexed signal, and communicating the fourth multiplexed signal to the CWDM demultiplexer.

20. **(Original)** A system as defined in claim 17, further comprising a second DWDM multiplexer configured to receive a third plurality of DWDM signals and multiplex the third plurality of DWDM signals into a third multiplexed signal, wherein each of the third plurality of DWDM signals is of a wavelength that can be superimposed on the same bandwidth of a CWDM channel as the first multiplexed signal, wherein the optical add delete multiplexer is configured to receive the third multiplexed signal and superimpose the third multiplexed signal to the second multiplexed signal over the same bandwidth channel as the first multiplexed signal.

21. **(Previously Presented)** A system as defined in claim 17, wherein the plurality of pluggable transceivers comprise DWDM transceiver modules in communication with the first DWDM multiplexer.

22. **(Previously Presented)** A system as defined in claim 21, wherein the DWDM transceiver modules comprise GigaBit Interface Converters selected from one of 100 GHz modules such that the second channel density is 64 channels, 50 GHz modules such that the second channel density is 128 channels, or 25 GHz modules such that the second channel density is 256 channels.

23. **(Original)** The system as defined claim 21, further comprising a switch in communication with the DWDM transceiver modules for routing data to and from other optical and/or computing devices.

24. **(Currently Amended)** The system as defined claim 17, wherein the first ~~DWDM~~ multiplexer comprises a multiplexer/demultiplexer module.